

Date: Thu, 22 Jul 93 00:30:55 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #887
To: Info-Hams

Info-Hams Digest Thu, 22 Jul 93 Volume 93 : Issue 887

Today's Topics:

ARRL New England Division Convention
Communities that unduly restrict Amateur Radio operations
CW continued [long]
Dipole antenna construction ?
Help wanted for Ultralite PC1701
How does an American sign in Canada?
ICOM W2A MODS
Intermodulation
Keenwood Transceiver wanted!
Radio Shack
Replacing ICOM 271/471 Ram Batteries
STILL waiting for your license? Read this and weep! (2 msgs)
Super Morse problem in Windows
Test Sessions: Northern California
TH78 Mods, other info?
TS50 Illegal! (2 msgs)
VHF balun construction?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 21 Jul 93 14:17:37 EDT
From: das.wang.com!wang!tossport!lee@uunet.uu.net
Subject: ARRL New England Division Convention
To: info-hams@ucsd.edu

....are the testing sessions going to be walk-in?

...anyone have any details?

Thanks,
Lee

(No, I'm just tired of filling out that reciprocal license request every year....)

Date: 21 Jul 93 15:39:48 GMT
From: microsoft!wingnut!edmitch@uunet.uu.net
Subject: Communities that unduly restrict Amateur Radio operations
To: info-hams@ucsd.edu

The City of Novato CA, according to a realtor I spoke to, has a 12 FOOT height limit on antennas. Above that height you must pay I believe a \$500 application fee for a public hearing. There is no guarantee that your application will be approved, even if it is for a modest antenna.

Needless to say, I didn't take a job in California. This WAS a factor in my decision. I work in the State of Washington instead and live in the County where there is a 35 foot height limit, but you can higher provided you have a one foot setback from the property line for each additional foot higher. That seems pretty reasonable.

And is ham communication valuable to my community? You bet! At my last QTH I was on the Board of Directors of the Search & Rescue unit where we relied on ham comms!

I was also an AEC and I'm doing the same kind of ARES and RACES stuff at the new QTH.

Ed Mitchell
KF7VY

Date: 20 Jul 93 00:05:01 GMT
From: ogicse!emory!dragon!nj8j!ben@network.ucsd.edu
Subject: CW continued [long]
To: info-hams@ucsd.edu

adams@chuck.dallas.sgi.com (Charles Adams) writes:

> i do not listen to music, tv, or listen to cw at high volumes. maybe

> paranoid or just too sensitive.

I used to work with a woman whose hearing went higher in frequency than usual. A misadjusted or just plain old monitor would run her out of the room because the 15075 Hz horizontal sweep would get too loud.

Ben

```
+-----+-----+
| Ben Coleman NJ8J          | "All that is not eternal is    |
| AX.25:  NJ8J@W4QO.#EAL.#ATL.GA.USA.NA | eternally irrelevant." |
| Internet: ben@nj8j.atl.ga.us          | C. S. Lewis |
+-----+-----+
```

Date: Wed, 21 Jul 93 20:13:47 GMT
From: ncrgw2.ncr.com!ncrhub2!torynews!kevin@uunet.uu.net
Subject: Dipole antenna construction ?
To: info-hams@ucsd.edu

In article <CA9uMv.3t0@srigenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:

>
>The short answer is it is the overall length, including center insulator.
>But it really doesn't make any difference, because the resonant length
>will vary from installation-to-installation depending on wire diameter,
>height above ground, proximity to nearby trees and conductors, angle
>between the two wires, etc.

>
Huh? How can the height above ground affect resonant frequency? Should not the resonant frequency be determined only by wire length and velocity factor? Or does the variation in radiation resistance caused by objects in the near field of the antenna *change* the velocity factor?

>
>Again, the SWR you end up with depends on the particular installation.
>An infinitely-thin dipole in free space it about 73 ohms, which would
>give a 1.46:1 SWR (with 50-ohm coax) at resonance. However, fatter
>wire and ground reflections tend to lower the impedance, so you typically
>get a pretty good match.

>
This I understand, but SWR has nothing to do with resonant frequency. I was experimenting last weekend with a 2-meter colinear antenna, and found that the best SWR (measured between radio and coax) was achieved at the high end of the band, even though the actual resonant frequency (measured using signal generator, scope with probe at feedpoint, and frequency counter) was below the 2M band by 1 MHz or so.

I have directed followups to rec.radio.amateur.antenna.

--

```

[] [] [] [] Kevin Sanders, KN6FQ NCR Torrey Pines
[] [] [] [] kevin.sanders@torreypinesca.ncr.com (619) 597-3602
[] [] [] [] kevin%beacons@cyber.net
[] [] [] []
[] [] [] [] Dump MS-DOS. Prevent Programmer Burnout with Linux.
```

Date: Wed, 21 Jul 1993 21:10:22 GMT
From: olivea!grapevine.lcs.mit.edu!lynx!random.ccs.northeastern.edu!
acm139@decwrl.dec.com
Subject: Help wanted for Ultralite PC1701
To: info-hams@ucsd.edu

I recently purchased an NEC Ultralite PC1701 laptop at a hamfest, and have some questions about it. (I've been trying NEC toll-free support, but I've been put on hold for greater than 30 minutes).

1) With the laptop turned upside down, and the back facing you, what is the polarity of the three pins on the 12 volt connector the main battery connects to (call them pins 1, 2, 3);

1a) If connected to a 12v source, which pin should connect to neg (-), and which pin should connect to pos (+)?

2) Might anyone in netland have any manuals for the unit (or even any technical specs) which I could get a copy of?

I have placed a similar message in the appropriate comp.sys.ibm.pc.* groups, along with having joined the PC170x mailing list.

Thanks much for any info.

=====

Scott Ehrlich	Internet: acm_se@neu.edu	
Amateur Radio: wylz	AX.25: wylz@wa1phy.ma.usa.na	

=====

Date: 21 Jul 1993 21:29 PST
From: agate!howland.reston.ans.net!gatech!destroyer!cs.ubc.ca!unixg.ubc.ca!
erich.triumf.ca!bennett@ames.arpa

Subject: How does an American sign in Canada?
To: info-hams@ucsd.edu

In article <Ne0X7B1w165w@nj8j.atl.ga.us>, ben@nj8j.atl.ga.us (Ben Coleman) writes...

>da884@cleveland.Freenet.Edu (David Toste) writes:

>

>>

>> You'll have to use WY1Z/VE2

>

>Now for the question I've never seen a clear answer to: If I, as an
>American ham, operate under the reciprocal agreement in Canada, how do my
>American band and segment privileges translate to operation in Canada? As
>an Extra-class operator, do I operate under the Canadian segmentation(or the
>lack of it), or am I still constrained by the American band segments? How
>do the other license classes translate to operation in Canada?

>

>Ben

According to a Canadian DOC circular dated 1983 (I really must get a copy of the current rules! :-)):

"<a foreign amateur> shall use the call sign, radio frequencies, types of emissions or mode of transmission he is authorized to use in his own country, if those frequencies, types of emission, or modes of transmission are authorised by these (Canadian) regulations."

So - you are limited by both your regs and band limits, and ours.

I recall several years ago that there was some attempt to change this slightly, to allow European amateurs to use all of our 2 metre band, although they would only be permitted to use half of it at home. I don't know if this was legally changed, but I have heard some europeans on the 146-148 area.

Peter Bennett VE7CEI	Vessels shall be deemed to be in sight
Internet: bennett@erich.triumf.ca	of one another only when one can be
Bitnet: bennett@triumfer	observed visually from the other
TRIUMF, Vancouver, B.C., Canada	ColRegs 3(k)

Date: 21 Jul 93 13:29:32 GMT

From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!concert!
duke!wolves!psybbs!fredmail@network.ucsd.edu

Subject: ICOM W2A MODS

To: info-hams@ucsd.edu

Electronic Specialists in Wilmington, NC, performed the full range of mods on my W2A for about \$55 (2 years ago).

73, Gary KN4AQ Raleigh, NC

Date: 21 Jul 93 22:49:19 GMT
From: news-mail-gateway@ucsd.edu
Subject: Intermodulation
To: info-hams@ucsd.edu

In response to Bob Myers KC0EW post where he says a mixer must have a non-linear component I respond:

Q: Where is the non-linear components in a doubly balanced diode or Gilbert cell mixer?

A: There aren't any (well there isn't supposed to be any :-). The mixer operates by virtue of its switching action. The output is the product of the two inputs. In the case of the Gilbert cell mixer the output really is $A \times B$ over a very wide range. For the diode DBM you need some drive to switch the diodes on an odd making the LO signal roughly a square wave with amplitude +1 and -1. Which is why they need a reasonable amount of drive so you keep the diodes OUT of their non-linear region so as to get good IMD performance. This is why diode DBMs have superior IMD performance to conventional square law mixers (which is what you describe in your post), and give even better IMD performace when driven by a sqaure wave rather than a sine wave. The same math works just as well for this type of mixer as the square law mixers you describe, except that you concentrate on $\sin(At) \times \sin(Bt)$ or more correctly for square wave drive the second term has to be the sum of all the odd harmonics (n) weighted by $1/n$.

This is what I mean by a "linear" mixer or a product detector which outputs a value proportional to $A \times B$.

These mixers avoid the "close in" distortion problem you describe.

Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com
Sit simplex, stulte!

Date: Mon, 19 Jul 93 23:47:58 -0400
From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!emory!dragon!nj8j!ben@ames.arpa

Subject: Keenwood Transceiver wanted!
To: info-hams@ucsd.edu

sl6xx@cc.usu.edu writes:

> Is there anyone has ideas about the place to buy a Keenwood 144/430 MHZ FM
^^^^^^^^

Whut kaind uf ac-cent ayis thayut? 8-)

Ben

```
+-----+-----+
| Ben Coleman NJ8J | "All that is not eternal is |
| AX.25: NJ8J@W4Q0.#EAL.#ATL.GA.USA.NA | eternally irrelevant." |
| Internet: ben@nj8j.atl.ga.us | C. S. Lewis |
+-----+-----+
```

Date: Thu, 22 Jul 1993 01:30:38 GMT
From: butch!netcomsv!netcom.com!netcomsv!pegasus!sherlock!rhair@uunet.uu.net
Subject: Radio Shack
To: info-hams@ucsd.edu

In article <22i4fgINN5ps@uwm.edu> pachner@csd4.csd.uwm.edu (Thomas Jay Pachner)
writes:

>I thought this newsgroup was for talking about the hobby. But lately it
>seems to be a Radio Shack stomping ground.

>
===> Deleted bits/nybbles/bytes/words <===

>
>As I stated I hope this newsgroup returns to amateur topics instead of a
>R.S. slash fest.

>
>--

>=====

```
>Thomas Jay Pachner -- Music Major, Bassist, Gamer, and Amateur Operator
>University of Wisconsin - Milwaukee - pachner@csd4.csd.uwm.edu
>Amateur Call Sign: almost 2 weeks since test
```

Here Here Mr. Pachner, I complement your sense of humanity!!!

A previous manager of mine believed that the best foundation for an Engineer
was an arts-oriented minor or major. Helps to broaden the mind. Perhaps it
also gives one more power/skill/will(?) to resist the tendency become
entrenched with expectations. How does one, then, give way to derision???

Welcome to ham radio! From one who sat in the passenger's seat for many years, it can be really nice to make contact with someone (ES1WW "August") from a foreign country (Tallin, Estonia) on your own!

For those who are waiting... There are many things that can be done in the meantime:

- Set your system up, if you have one.
- Plan your first 5 antenna variations.
- Find out where any local club(s) meet.
- Get a "feel" for how one operates on the bands.
- Find out about the various awards in ham radio...
- build an xceiver?
- etc.;etc.;etc.;

"Catch the wave"

Richard Hair KD6UMA/AG (also waiting)

Date: Wed, 21 Jul 93 23:47:38 GMT
From: olivea@apple.com!weitek!johnm@uunet.uu.net
Subject: Replacing ICOM 271/471 Ram Batteries
To: info-hams@ucsd.edu

I am concerned about the longevity of my Icom 271/471 internal batteries. These have an unknown age. I have been told that these can be replaced by first temporarily connecting a new battery in parallel with the existing one, removing the old battery, fitting a new one, and finally disconnecting the temporary one. Has anyone had any experience with this maneuver ? Sounds scary, but theory says it should be ok.....

John Mcleod N6RCD.

Date: 21 Jul 93 20:04:28 GMT
From: ogicse!uwm.edu!cs.utexas.edu!usc!nic.csu.net!eis.CalState.EDU!
jherndo@network.ucsd.edu
Subject: STILL waiting for your license? Read this and weep!
To: info-hams@ucsd.edu

I haven't looked into the "allowed length of time" that the VE and ARRL can hold the application. If it is 10 days per section, then I can't see any excuse for the ARRL holding on to the application for over 10 days.

Also, while I'm getting my 560 cents worth in, they should have a sorter

that sorts between NEW licenses vs. upgrades. Those who are upgrading can use a temporary call on the air, while those who are new hams are "back quiet" for 2-3 months. NEW licenses should get priority to help push them through the system.

But as I rot for the next few weeks (working on number 5 now) I learn as much as I can about antennas, equipment, t-hunting, and ham etiquette.

[> John W. Herndon - INTERNET: jherndo@eis.calstate.edu <]

Date: Wed, 21 Jul 93 16:34:43 EDT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
usenet.ins.cwru.edu!wariat.org!wariat.org!nraven!floyd@network.ucsd.edu
Subject: STILL waiting for your license? Read this and weep!
To: info-hams@ucsd.edu

bodoh@dgg.cr.usgs.gov (Tom Bodoh) writes:

> In article <CAIpCC.MsL@dartvax.dartmouth.edu>, Kenneth.E.Harker@Dartmouth.Edu
> |> In article <22i5vt\$9k6@techbook.techbook.com>
> |> genew@techbook.techbook.com (Gene Wolford) writes:
> |>
> |> > I called the ARRL VE info number, 1-800-9ARRLVE.
> |>

[Messages Deleted]

Can you guys say W5YI???

I'll bet you can now! :) Unfortunately most of us have learned the hard way that you don't want an ARRL VE to be involved in your upgrading, or initial licensing.....

And just think!!! They're going to take over some of the licensing aspects..... hmm, I hope no one want a club call for the next decade or so...

73 de N8VUR / Doug

__Douglas A. Dever__ floyd@nraven.wariat.org

QSO on 444.600 or 146.520 anytime!

Date: Tue, 20 Jul 1993 18:48:03 GMT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!elroy.jpl.nasa.gov!sdd.hp.com!
hpscit.sc.hp.com!hplextra!hpfcs0!hplvec!tcline@network.ucsd.edu
Subject: Super Morse problem in Windows
To: info-hams@ucsd.edu

> In rec.radio.amateur.misc, david@bu.edu (David Gagnon) writes:
>
> I am having a bit of difficulty with the Super Morse program. It works fine
> when I run it directly from DOS, but if I try and call it from within
> Windows or in a DOS shell under Windows, I end up with the dits sounding
> like clicks instead of tones, and the dahs sounding like proper tones.
>
> --
> David R. Gagnon, MD MPH david@med-busphib.bu.edu
> Boston University School of Public Health gagnon@math.bu.edu
> Boston, Massachusetts (617) 638-5172

I did a test and "me too": My SM 3.16 works fine under DOS, but I also
get clicks for dots under Windows 3.1 (machine = HP Vectra 486/66ST, DOS
5.0).

But sorry, I have no solutions.

73

Ted Cline, NØRQV
ted_cline@hplsla.lvld.hp.com
tcline@hplslx.lvld.hp.com
VOICE: (303) 679-2352
FAX: (303) 679-5971
VXI Systems Division
Hewlett-Packard, M/S CU-326
815 14th Street SW
P.O. Box 301
Loveland, CO 80537 USA

Date: 22 Jul 93 00:06:05 GMT
From: news.tek.com!gvgpsa.gvg.tek.com!gold.gvg.tek.com!groverc@uunet.uu.net
Subject: Test Sessions: Northern California
To: info-hams@ucsd.edu

Would someone be so kind as to mail me a listing of the
NoCal test sessions for the next six months?

thanks

Grover

WT6P

Date: Wed, 21 Jul 1993 20:38:24 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!torn!
newshost.uwo.ca!uwovax.uwo.ca!ppddgc@network.ucsd.edu
Subject: TH78 Mods, other info?
To: info-hams@ucsd.edu

I am finally on the verge of upgrading from a Kenwood TH77 to a TH78 and would appreciate any feedback about the radio. My list of mods is about a year old so would appreciate current info, especially whether it would transmit as high as 469 mhz and what the sensitivity is like in the 860 mhz range.

Dave Colvin VE3ZDC
ARES DEC

University of Western Ontario
London, Ontario, Canada

Date: 21 Jul 93 21:23:02 GMT
From: elroy.jpl.nasa.gov!swrinde!gatech!concert!duke!news.duke.edu!ee.ee.duke.edu!
jbs@ames.arpa
Subject: TS50 Illegal!
To: info-hams@ucsd.edu

In article <1993Jul21.120648.20463@hemlock.cray.com> dadams@cray.com writes:
>

>I wish the rule were ammended to allow licenced Amateurs the privelege to
>use 11 meters (as secondary users, of course) also allowing them to
>contact other legitimate users of those frequencities. (In other words
>I think that it is really silly to have to have two radios in the car
>to work 10 and 11 meters. If the TS-50 can do both, why not allow it
>to do so if the user is a licenced Ham as long as he abides the 4 watt
>pep rule etc?

Because the FCC correctly assumes that the hams would not stay within the 4 watt output limit.

-joe

--

You spend the night
Like you were spending a dime
- Lyle Lovett

Date: Mon, 19 Jul 1993 18:20:03 +0000
From: pipex!uknet!bnr.co.uk!demon!llondel.demon.co.uk!dave@uunet.uu.net
Subject: TS50 Illegal!
To: info-hams@ucsd.edu

In article <22e778\$t15@jericho.mc.com> levine@mc.com writes:
> The lead article in this week's W5YI Report is the story of several
> Ham Radio retailers (like HRO) who were fined \$7000 for selling the TS50
> because it can transmit out of the Ham bands right out of the box
> and it isn't type accepted for those frequencies. The article also
> specifically mentioned the FT530 HT which can also transmit out of
> the Ham bands right out of the box (140.000 - 150.000)
>
> If it is illegal to sell these radios, then is it illegal to use them?
> Is it legal to use a radio which is type accepted for a part of the
> spectrum it covers, but not the entire spectrum it covers?
>
Shows how daft some laws are: my car is capable of exceeding the speed limit
but it wasn't illegal for the dealer to sell it to me.....

Hopefully the law regarding use does take into consideration that most
users are responsible people who know what they are doing.

Dave

* G4WRW @ GB7WRW.#41.GBR.EU AX25 * You think *you* have problems? *
* dave@llondel.demon.co.uk Internet * What do you do if you *are* *
* g4w1w@g4w1w.ampr.org Amprnet * a manically depressed robot?? *

Date: 21 Jul 93 21:17:02 GMT
From: cis.ohio-state.edu!math.ohio-state.edu!howland.reston.ans.net!gatech!
gsusgi1.gsu.edu!gsusgi1.gsu.edu!usg4201@RUTGERS.EDU
Subject: VHF balun construction?
To: info-hams@ucsd.edu

I want to build a VHF balun for 300 to 450 ohms out. What kind of toroid coil and how many windings must I use? Many thanks. Paul KD4APH

--

The Law Guy

Paul Russell
LAWPMR on LAW1
x 4428

Date: Wed, 21 Jul 93 20:24:08 GMT
From: ncrgw2.ncr.com!ncrhub2!torynews!kevin@uunet.uu.net
To: info-hams@ucsd.edu

References <930719114400.2ec@MAR65.MAR.ORA.FDA.GOV>, <fred-
mckenzie-190793181548@k4dii.ksc.nasa.gov>, <10772@tekig7.PEN.TEK.COM>ews
Subject : Re: TS50

In article <10772@tekig7.PEN.TEK.COM> royle@tekig6.PEN.TEK.COM (Roy W Lewallen) writes:

>doesn't sell rigs, so it isn't done. (I'm told but haven't verified that the
>old Collins rigs had not only a consistently sized S-unit, but a calibrated
>signal strength for S9. Neither of these is so for modern rigs.)

My Hammarlund SP-600 has an S-meter calibrated in uV and dB, although I haven't looked at a schematic or tested it for accuracy.

--

[] [] [] [] [] []	Kevin Sanders, KN6FQ	NCR Torrey Pines
[] [] [] [] []	kevin.sanders@torreypinesca.ncr.com	(619) 597-3602
[] [] [] [] [] []	kevin%beacons@cyber.net	
[] [] [] [] []		
[] [] [] [] [] []	Dump MS-DOS. Prevent Programmer Burnout with Linux.	

End of Info-Hams Digest V93 #887
